Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	7	(("5231162") or ("6399669") or ("4898753") or ("5234966") or ("5859171") or ("6586081") or ("4474662")).PN.	USPAT	OR	OFF	2005/03/17 19:38
L2	2	(("5859171") or ("6586081")).PN.	USPAT	OR	OFF	2005/03/17 19:42
L3	6	(("6544648") or ("6332990") or ("5601938") or ("5358802") or ("5260855") or ("4997804")).PN.	USPAT	OR	OFF	2005/03/17 19:53
L4	13	(("6544648") or ("6332990") or ("5601938") or ("5358802") or ("5260855") or ("4997804") or ("4898753") or ("5231162") or ("5234966") or ("5859171") or ("6586081") or ("6399669") or ("4474662")).PN.	USPAT	OR	OFF	2005/03/17 19:55
L5	115375	polyimide aerogel and (polyamic acid or polyimide precursor) and gel?	USPAT; EPO; JPO; DERWENT	OR	ON	2005/03/17 20:08
L6	38986	5 and (supercritical "CO2" or carbon dioxide)	USPAT; EPO; JPO; DERWENT	OR	ON	2005/03/17 20:11
L7	31824	6 and (dehydrating agent or chemical dehydrating agent or acetic anhydride or propionic anhydride or ?butyric anhydride or benzoic anhydride or trifluoroacetic anhydride or phosphous trichloride or trialkylamine or pyridine or isoquinoline or morpholine or piperadine or piperazine)	USPAT; EPO; JPO; DERWENT	OR	ON	2005/03/17 20:16
L8	1080373	7 and aerogel density	USPAT; EPO; JPO; DERWENT	OR	ON	2005/03/17 20:16
L9	355416	7 and supercritical near3 carbon dioxide	USPAT; EPO; JPO; DERWENT	OR	ON	2005/03/17 20:17
L10	120082	7 and aliphatic diamine	USPAT; EPO; JPO; DERWENT	OR	ON	2005/03/17 20:17
L11	114728	10 and (polysiloxane diamine or diaminosiloxane or siloxane adj2 diamine)	USPAT; EPO; JPO; DERWENT	OR	ON	2005/03/17 20:18
L12	1382	11 and cosolvent	USPAT; EPO; JPO; DERWENT	OR	ON <sup>.</sup>	2005/03/17 20:18
L13	6934	12 and carbon aerogel	USPAT; EPO; JPO; DERWENT	OR	ON	2005/03/17 20:19

L14	7	12 and pyrolyz\$3	USPAT; EPO; JPO; DERWENT	OR	ON	2005/03/17 20:21
L15	82682	5 and (green film or gel film or gel state)	USPAT; EPO; JPO; DERWENT	OR	ON	2005/03/17 20:38
L16	2899	9 and 13	USPAT	OR	OFF	2005/03/17 20:38
L17	2775	16 and (carbon aerogel or foam)	USPAT	OR	OFF	2005/03/17 20:39
L18	2439	17 and (polyimide or polyamic acid foam)	USPAT	OR	OFF	2005/03/17 20:39
L19	47	"CO2" and 18	USPAT	OR	OFF	2005/03/17 20:40
L20	. 9	19 and supercritical	USPAT	OR	OFF	2005/03/17 20:44
L21	5782	5 and polyimide same (foam or aerogel or carbon aerogel)	USPAT	OR	OFF	2005/03/17 20:45
L22	100	21 and pyrolyz\$5	USPAT	OR	OFF	2005/03/17 20:45
L23	48	22 and (imidiz\$5 agent)	USPAT	OR	OFF	2005/03/17 20:46

# **WEST Search History**

Hide Items Restore Clear Cancel

DATE: Thursday, March 17, 2005

Hide?	<u>Set</u> Name	Query	<u>Hit</u> Count
	DB=U	JSPT,EPAB,JPAB,DWPI; PLUR=YES; OP=ADJ	
	L24	L22 and aliphatic diamine	1
	L23	L22 and pyrolyz?	0
	L22	polyimide aerogel or foam and (polyamic acid or polyimide precursor) and (gel film or gel state or green film)	13
	DB=U	JSPT; PLUR=YES; OP=ADJ	
	L21	L20 and @pd > 20041001	0
	L20	L19 and dehydrating	0
	L19	L16 and pore size\$1	2
	L18	L16 and mesoporous and pore size\$1	0
	L17	L16 and mesoporous same pore size\$1	0
	L16	L15 and (polyamic acid or precursor)	29
	L15	(polyimide gel or polyimide aerogel) and (sol gel process or method)	46
	L14	polyimide foam and 521/82	6
	L13	polyimide gel and 521/82	0
	L12	polyimide aerogel and 521/82	0
	DB=U	JSPT,EPAB,JPAB,DWPI; PLUR=YES; OP=ADJ	
	L11	polyimide and carbon aerogel	11
	L10	L9 and (supercritical co2 or supercritical carbon dioxide)	1
	L9	polyimide gel	61
	L8	L7 and (supercritical CO2 or supercritical carbon dioxide)	1
	L7	polyimide aerogel	10
	DB=I	OWPI; PLUR=YES; OP=ADJ	
	L6	polyimide aerogel and 521/82	0
	DB=U	JSPT,EPAB,JPAB,DWPI; PLUR=YES; OP=ADJ	
	L5	polyimide aerogel and 521/82	0
	DB=F	PGPB,USPT; PLUR=YES; OP=ADJ	
	L4	polyimide aerogel and 521/82	0
_		JSPT; PLUR=YES; OP=ADJ	
	L3	L1 and (polyimide aerogel or polyimide gel)	0
	L2	L1 and polyimide aerogel	0
		6670402.DID. or 6544648.did. or 6332990.did. or 5601938.did. or	

 $h \qquad e \quad b \qquad b \quad cg \quad b \quad chh \qquad \quad e \quad fb \quad fh \qquad \quad f \quad c \qquad \quad e \quad \quad h \; gh \quad \quad e$ 

12

L1 5358802.did. or 5260855.did. or 4997804.did. or 5284519.did. or 5376209.did. or 5502156.did. or 5520960.did. or 5575955.did.

**END OF SEARCH HISTORY** 

# **Hit List**



#### **Search Results** - Record(s) 1 through 1 of 1 returned.

☐ 1. Document ID: WO 2004009673 A1

Using default format because multiple data bases are involved.

L24: Entry 1 of 1

File: EPAB

Jan 29, 2004

PUB-NO: WO2004009673A1

DOCUMENT-IDENTIFIER: WO 2004009673 A1

TITLE: POLYIMIDE AEROGELS, CARBON AEROGELS, AND METAL CARBIDE AEROGELS AND METHODS

OF MAKING SAME

PUBN-DATE: January 29, 2004

INVENTOR-INFORMATION:

NAME COUNTRY

WENDALL, RHINE US
WANG, JING US
BEGAG, REDOUANE US

INT-CL (IPC):  $\underline{\text{C08}}$   $\underline{\text{G}}$   $\underline{73}/\underline{10}$ ;  $\underline{\text{C08}}$   $\underline{\text{J}}$   $\underline{9}/\underline{28}$ ;  $\underline{\text{B01}}$   $\underline{\text{J}}$   $\underline{13}/\underline{00}$   $\underline{\text{EUR-CL}}$  (EPC):  $\underline{\text{B01J013/00}}$ ;  $\underline{\text{C08G073/10}}$ ,  $\underline{\text{C08G073/10}}$ 

Title Citation Front Review Classification Date Reference Sergences Fitsophie	raks Claims KWM0
Generate Collection Print Fwd Refs Bkwd Refs	Generate 0
Term	Documents
ALIPHATIC	344003
ALIPHATICS	3054
DIAMINE	100036
DIAMINES	35701
(22 AND (ALIPHATIC ADJ DIAMINE)).USPT,EPAB,JPAB,DWPI.	1
(L22 AND ALIPHATIC DIAMINE).USPT,EPAB,JPAB,DWPI.	1

Display Format: - Change Format

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First Hit

Previous Doc

Next Doc

Go to Doc#

**End of Result Set** 

Generate Collection Print

L24: Entry 1 of 1

File: EPAB

Jan 29, 2004

PUB-NO: WO2004009673A1

DOCUMENT-IDENTIFIER: WO 2004009673 A1

TITLE: POLYIMIDE AEROGELS, CARBON AEROGELS, AND METAL CARBIDE AEROGELS AND METHODS

OF MAKING SAME

PUBN-DATE: January 29, 2004

INVENTOR-INFORMATION:

NAME COUNTRY WENDALL, RHINE US

WANG, JING US
BEGAG, REDOUANE US

ASSIGNEE-INFORMATION:

NAME COUNTRY
ASPEN AEROGELS INC US
WENDALL RHINE US
WANG JING US
BEGAG REDOUANE US

APPL-NO: US00323188 APPL-DATE: July 22, 2003

PRIORITY-DATA: US39789402P (July 22, 2002)

INT-CL (IPC):  $\underline{\text{C08}}$   $\underline{\text{G}}$   $\underline{73/10}$ ;  $\underline{\text{C08}}$   $\underline{\text{J}}$   $\underline{9/28}$ ;  $\underline{\text{B01}}$   $\underline{\text{J}}$   $\underline{13/00}$  EUR-CL (EPC):  $\underline{\text{B01J013/00}}$ ;  $\underline{\text{C08G073/10}}$ ,  $\underline{\text{C08G073/10}}$ 

#### ABSTRACT:

CHG DATE=20040217 STATUS=O>A preparation process of polyimide aerogels that composed of aromatic dianhydrides and aromatic diamines or a combined aromatic and aliphatic diamines is described. Also descried is a process to produce carbon aerogels derived from polyimide aerogel composed of a rigid aromatic diamine and an aromatic dianhydride. Finally, the processes to produce carbon aerogels or xerogelaerogel hybrid, both of which impregnated with highly dispersed transition metal clusters, and metal carbide aerogels, deriving from the polyimide aerogels composed of a rigid aromatic diamine and an aromatic dianhydride, are described. The polyimide aerogels and the polyimide aerogel derivatives consist of interconnecting mesopores with average pore size at 10 to 30 nm and a mono-dispersed pore size distribution. The gel density could be as low as 0.008 g/cc and accessible surface area as high as1300 m2/q.

Previous Doc Next Doc Go to Doc#

## **Hit List**

Bkwd Refs: Generate Collection Print: Fwd Refs Generate OACS

**Search Results -** Record(s) 1 through 10 of 13 returned.

☐ 1. Document ID: US 6821791 B2

Using default format because multiple data bases are involved.

L22: Entry 1 of 13

File: USPT

Nov 23, 2004

US-PAT-NO: 6821791

DOCUMENT-IDENTIFIER: US 6821791 B2

TITLE: Method for reworking metal layers on integrated circuit bond pads

DATE-ISSUED: November 23, 2004

INVENTOR-INFORMATION:

NAME

CITY

STATE

ZIP CODE

COUNTRY

Stierman; Roger J.

Dallas

ΤX TX

Moore; Thomas M. Shinn; Gregory B. Dallas

Dallas TX

US-CL-CURRENT: 438/4

Full Tit	tle C	itation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Drawe B
										O la lilla	10000	. U1300. I

L 2. Document ID: US 6800555 B2

L22: Entry 2 of 13

File: USPT

Oct 5, 2004

US-PAT-NO: 6800555

DOCUMENT-IDENTIFIER: US 6800555 B2

TITLE: Wire bonding process for copper-metallized integrated circuits

DATE-ISSUED: October 5, 2004

INVENTOR-INFORMATION:

NAME

CITY

STATE ZIP CODE COUNTRY

Test; Howard R. Amador; Gonzalo Plano

TXTX

Subido; Willmar E.

Dallas Garland

TX

US-CL-CURRENT: 438/687; 257/E21.508, 257/E23.02, 438/597, 438/614, 438/652, <u>438/653</u>, <u>438/678</u>

b g ee e f

e fb fh ef Full Title Citation Front Review Classification Date Reference Sequences Attachments Claims KWIC Draw De

☐ 3. Document ID: US 6619538 B1

L22: Entry 3 of 13

File: USPT

Sep 16, 2003

US-PAT-NO: 6619538

DOCUMENT-IDENTIFIER: US 6619538 B1

TITLE: Nickel plating process having controlled hydrogen concentration

DATE-ISSUED: September 16, 2003

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Test; Howard R. Plano TX Klonis; Homer B. Dallas TX

US-CL-CURRENT: 228/208; 228/180.5, 228/4.5

Full Title Citation Front Review Classification Date Reference Southerness Claims KWIC Draw De

☐ 4. Document ID: US 6534327 B2

L22: Entry 4 of 13

File: USPT

Mar 18, 2003

US-PAT-NO: 6534327

DOCUMENT-IDENTIFIER: US 6534327 B2

TITLE: Method for reworking metal layers on integrated circuit bond pads

DATE-ISSUED: March 18, 2003

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Stierman; Roger J. Dallas TX
Moore; Thomas M. Dallas TX
Shinn; Gregory B. Dallas TX

US-CL-CURRENT: 438/4; 257/E21.174, 257/E21.508

Full Title Citation Front Review Classification Date Reference Sequences Attachments Claims KMC Draw De

☐ 5. Document ID: US 6475609 B1

L22: Entry 5 of 13 File: USPT Nov 5, 2002

US-PAT-NO: 6475609

DOCUMENT-IDENTIFIER: US 6475609 B1

h eb b g ee ef e fb fh ef b e

#### \*\* See image for Certificate of Correction \*\*

TITLE: Color shifting film glitter

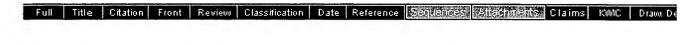
DATE-ISSUED: November 5, 2002

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Whitney; Leland R. St. Paul MN Ouderkirk; Andrew J. Woodbury MN Scanlan; Thomas J. Woodbury MN

US-CL-CURRENT: 428/212; 428/323, 428/402, 428/403, 428/407



☐ 6. Document ID: US 6455140 B1

L22: Entry 6 of 13 File: USPT Sep 24, 2002

US-PAT-NO: 6455140

DOCUMENT-IDENTIFIER: US 6455140 B1

\*\* See image for Certificate of Correction \*\*

TITLE: Visible mirror film glitter

DATE-ISSUED: September 24, 2002

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Whitney; Leland R. St. Paul MN Ouderkirk; Andrew J. Woodbury MN

US-CL-CURRENT: 428/212; 428/323, 428/402, 428/403, 428/407

Full	Title	Citation	Front	Review	Classification	Date	Reference	3-00000000	Afadments	Claims	KWIC	Draw, De
*****							·					

☐ 7. Document ID: US 6448650 B1

L22: Entry 7 of 13 File: USPT Sep 10, 2002

US-PAT-NO: 6448650

DOCUMENT-IDENTIFIER: US 6448650 B1

TITLE: Fine pitch system and method for reinforcing bond pads in semiconductor

devices

DATE-ISSUED: September 10, 2002

INVENTOR-INFORMATION:

h eb b g ee ef e fb fh ef b e

NAME CITY STATE ZIP CODE COUNTRY

Saran; Mukul Richardson TX
Martin; Charles A. Melissa TX
Cox; Ronald H. Plano TX

US-CL-CURRENT: <u>257/758</u>; <u>257/750</u>, <u>257/763</u>, <u>257/773</u>, <u>257/774</u>, <u>257/775</u>, <u>257/786</u>,

257/E23.02

Full Title Citation Front Review Classification Date Reference **Sequences Attachments** Claims KWIC Drawi De

□ 8. Document ID: US 6435398 B2

L22: Entry 8 of 13 File: USPT Aug 20, 2002

US-PAT-NO: 6435398

DOCUMENT-IDENTIFIER: US 6435398 B2

TITLE: Method for chemically reworking metal layers on integrated circuit bond pads

DATE-ISSUED: August 20, 2002

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Hartfield; Cheryl McKinney TX Moore; Thomas M. Dallas TX

US-CL-CURRENT: 228/103; 228/119, 257/E21.508, 257/E21.525

Full Title Citation Front Review Classification Date Reference South 503 Atechnomics Claims KMC Draw. De

☐ 9. Document ID: US 5789319 A

L22: Entry 9 of 13 File: USPT Aug 4, 1998

US-PAT-NO: 5789319

DOCUMENT-IDENTIFIER: US 5789319 A

TITLE: Method of dual masking for selective gap fill of submicron interconnects

DATE-ISSUED: August 4, 1998

INVENTOR-INFORMATION:

NAME : CITY STATE ZIP CODE COUNTRY

Havemann; Robert H. Garland TX Stoltz; Richard A. Plano TX

US-CL-CURRENT: 438/668; 257/E21.576, 438/669, 438/763, 438/778, 438/780

Full Title Citation Front Review Classification Date Reference Sequences Attachments Claims KMC Draw De

hebbgeeef efbfhef be

□ 10. Document ID: US 5786624 A

L22: Entry 10 of 13

File: USPT

Jul 28, 1998

US-PAT-NO: 5786624

DOCUMENT-IDENTIFIER: US 5786624 A

TITLE: Dual masking for selective gap fill of submicron interconnects

DATE-ISSUED: July 28, 1998

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Havemann; Robert H. Garland TX Stoltz; Richard A. Plano TX

US-CL-CURRENT: <u>257/635</u>; <u>257/638</u>, <u>257/E21.576</u>

Term	Documents
POLYIMIDE	102784
POLYIMIDES	21631
AEROGEL	4433
AEROGELS	2283
FOAM	344146
FOAMS	56655
POLYAMIC	7500
POLYAMICS	1
ACID	1874200
ACIDS	559523
PRECURSOR	148635
POLYIMIDE AEROGEL OR FOAM AND (POLYAMIC ACID OR POLYIMIDE PRECURSOR) AND (GEL FILM OR GEL STATE OR GREEN FILM)).USPT,EPAB,JPAB,DWPI.	13

There are more results than shown above. Click here to view the entire set.

Display Format: - Change Format

hebbgeeef efbfhef b

## **Hit List**

# Clear Generate Collection Print Fwd Refs Bkwd Refs Generate OACS

**Search Results -** Record(s) 11 through 13 of 13 returned.

☐ 11. Document ID: US 5690961 A

Using default format because multiple data bases are involved.

L22: Entry 11 of 13

File: USPT

Nov 25, 1997

US-PAT-NO: 5690961

DOCUMENT-IDENTIFIER: US 5690961 A

TITLE: Acidic polysaccharides crosslinked with polycarboxylic acids and their uses

DATE-ISSUED: November 25, 1997

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Nguyen; Tuyen T. Wilmington DE

US-CL-CURRENT: 424/488; 424/423, 424/443, 424/499, 424/78.3, 442/123, 514/54,

<u>514/777</u>, <u>516/105</u>, <u>525/54.2</u>, <u>525/937</u>

Full Title Citation Front Review Classification Date Reference Sequences Affectments Claims KMC Draw De

☐ 12. Document ID: WO 2004009673 A1

L22: Entry 12 of 13 File: EPAB Jan 29, 2004

PUB-NO: WO2004009673A1

DOCUMENT-IDENTIFIER: WO 2004009673 A1

TITLE: POLYIMIDE AEROGELS, CARBON AEROGELS, AND METAL CARBIDE AEROGELS AND METHODS

OF MAKING SAME

PUBN-DATE: January 29, 2004

INVENTOR-INFORMATION:

NAME COUNTRY

WENDALL, RHINE US
WANG, JING US
BEGAG, REDOUANE US

INT-CL (IPC):  $\underline{\text{C08}}$   $\underline{\text{G}}$   $\underline{73/10}$ ;  $\underline{\text{C08}}$   $\underline{\text{J}}$   $\underline{9/28}$ ;  $\underline{\text{B01}}$   $\underline{\text{J}}$   $\underline{13/00}$  EUR-CL (EPC):  $\underline{\text{B01J013/00}}$ ;  $\underline{\text{C08G073/10}}$ ,  $\underline{\text{C08G073/10}}$ 

Full Title Citation Front Review Classification Date Reference Seguences Attachments Claims KVMC Draw, De

#### □ 13. Document ID: AU 2003261238 A1, WO 2004009673 A1, US 20040132845 A1

L22: Entry 13 of 13

File: DWPI

Feb 9, 2004

DERWENT-ACC-NO: 2004-143274

DERWENT-WEEK: 200450

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TITLE: Production of <u>polyimide aerogel</u> for carbon aerogel, involves contacting diamine and aromatic dianhydride monomers in solvent, contacting resulting poly (amic acid) with dehydrating agent, and drying resulting polyimide gel

INVENTOR: BEGAG, R; WANG, J; WENDALL, R; RHINE, W

PRIORITY-DATA: 2002US-397894P (July 22, 2002), 2003US-0625501 (July 22, 2003)

PATENT-FAMILY:

PUB-NO PUB-DATE LANGUAGE **PAGES** MAIN-IPC AU 2003261238 A1 February 9, 2004 000 C08G073/10 WO 2004009673 A1 January 29, 2004 058 Е C08G073/10 US 20040132845 A1 July 8, 2004 000 C08J009/00

INT-CL (IPC):  $\underline{B01} \ \underline{J} \ \underline{13/00}; \ \underline{C08} \ \underline{G} \ \underline{73/10}; \ \underline{C08} \ \underline{J} \ \underline{9/00}; \ \underline{C08} \ \underline{J} \ \underline{9/28}$ 

	<u>.</u> Generat
Гегт	Documents
POLYIMIDE	102784
POLYIMIDES	21631
AEROGEL .	4433
AEROGELS	2283
FOAM	344146
FOAMS	56655
POLYAMIC	7500
POLYAMICS	
ACID	1874200
ACIDS	559523
POLYIMIDE AEROGEL OR FOAM AND (POLYAMIC ACID OR POLYIMIDE PRECURSOR) AND (GEL FILM OR GEL STATE OR GREEN FILM)).USPT,EPAB,JPAB,DWPI.	13